

## **REMARKS**

### **I. Status of Claims**

Claims 1-33 are pending in the application. Claim 6 is amended. Claims 1-5 and 7-21 are allowed. Claims 6, 22, 27, 28, 32 and 33 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Publication No. 2002/0096925 A1 to Uramichi ("Uramichi"). Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over Uramichi in view of U.S. Patent No. 6,003,945 to Kojima ("Kojima"). Claims 23-26, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Each of the Examiner's rejections is discussed below.

### **II. Section 102**

Claims 6, 22, 27, 28, 32 and 33 are rejected under 35 U.S.C. §102(b) as being anticipated by U.S. Publication No. 2002/0096925 A1 to Uramichi. The rejection is respectfully traversed.

Uramichi discloses a seat hinge assembly having a stationary disc 11 and a movable disc 12. Slide pawls 15A-D have teeth 15b that engage ratchet 12c on movable disc 12. A rotating cam 16 has first cam bearing portions 16b that engage a middle bearing portion 15f of slide pawls 15 to drive slide pawls 15 into engagement with ratchet 12c. A working plate 18 has cam grooves 18d that engage cam pins 15e of slide pawls 15 to drive slide pawls 15 out of engagement with ratchet 12c.

### **Claims 6, 22, 27, and 28**

Uramichi fails to disclose or make obvious a reclining vehicle seat hinge assembly including a pair of primary pawls and a pair of secondary pawls, where the secondary pawls have a construction identical to that of the primary pawls, such that the primary and secondary pawls are

interchangeable with one another, as required by independent claim 6.

The identical construction of the primary and secondary pawls of the present invention, that is, their commonality, allows for the interchangeability of these parts, providing for reduced handling, ease of assembly, and reduced manufacturing costs, as noted in the present specification at page 5, paragraph 8, lines 3-4, and at page 11, paragraph 28, lines 1-2. This commonality and interchangeability is not found in Uramichi, and, in fact, Uramichi expressly teaches away from such commonality and interchangeability.

By design, the pawls 15A-D of Uramichi are not identical and not interchangeable. As acknowledged in the December 1, 2005 Office Action, pawl 15A of Uramichi has a different function and a cam pin that is longer than the other pawls. It cannot be interchanged with the other pawls. The purpose behind the difference in the construction of pawl 15A clearly explains why the pawls are not identical and not interchangeable.

Specifically, as noted in the specification of Uramichi, “a cam pin 15e... **is formed in the pawl body 15a...**[and] that the cam pin 15e of the slide pawl 15A is formed to be **slightly longer** than those of the other slide pawls 15.” (page 2, paragraph 27; emphasis added.). Cam pin 15e of slide pawl 15A serves as the only cam pin connected with unlock plate 19, such that operation of unlock plate 19 requires this different cam pin. Not only is slide pawl 15A not identical to the other pawls, it would not function properly if it were identical to the others.

Thus, the limitation requiring that the secondary pawls have a construction identical to that of the primary pawls, such that the primary and secondary pawls are interchangeable with one another, is **not found** in Uramichi. Identical and interchangeable slide pawls would not even be obvious in view of Uramichi, since identical and interchangeable pawls would defeat the purpose of the longer cam pin 15e of slide pawl 15A of Uramichi. Accordingly, the rejection should be withdrawn.

### **Claims 32, and 33**

Uramichi fails to disclose or make obvious a reclining vehicle seat hinge assembly including a pair of secondary pawls configured to be driven radially outward with respect to the first housing upon engagement with a corresponding camming surface of a secondary cam, as required by independent claim 32.

The Advisory Action maintains that “the secondary cam engages the secondary pawl components at all times, and, therefore, the secondary plate cooperates to drive the secondary pawls both inwardly and outwardly.” Applicants respectfully submit that this statement does not accurately describe the configuration and function of the working plate 18 of Uramichi.

As seen in FIGS. 3-4, and described in the specification of Uramichi, working plate 18 only functions to drive pawls 15A-D radially inwardly out of engagement with ratchet 12c, while rotating cam 16 drives the pawls radially outwardly into engagement with ratchet 12c. This is described in the specification at page 4, paragraph 41, where Uramichi discloses that bearing cam portions 16b of rotating cam 16 abut middle bearing portions 15f of slide pawls 15A-D, causing slide pawls 15A-D to mesh with ratchet 12c. Additionally, at page 4, paragraph 43, Uramichi discloses that “working plate 18 radially inwardly presses the cam pin 15e of each of the slide pawls 15 ... causing slide of the slide pawl... bringing the slide pawls 15 out of mesh with the ratchet 12C.”

It is the radially exterior edges of cam grooves 18D of working plate 18 that drive the pawls radially inward out of engagement. The radially interior edges of cam grooves 18D do not engage pawls 15A-D at all. As can be seen in FIG. 3, in which the pawls are positioned in their radially outward and engaged position, the radially interior edges of cam grooves 18D are spaced apart from pawls 15A-D. In FIG. 4 on the other hand, the radially exterior edges of cam grooves 18D are seen to be abutting pawls 15A-D since, as illustrated here, they have driven pawls 15A-D radially inward

out of engagement.

Thus it is clear that rotating cam 16 (the primary cam) moves slide pawls 15A-D radially outward into engagement with ratchet 12C and working plate 18 (the secondary cam) only moves slide pawls 15A-D radially inward out of engagement with ratchet 12C.

Accordingly, this required limitation is not found in Uramichi, and the rejection is improper and should be withdrawn.

### **III. Section 103**

Claim 31 is rejected under 35 U.S.C. §103(a) as being unpatentable over Uramichi in view of Kojima. Kojima is recited as disclosing a cooperating washer. This rejection is respectfully traversed.

Kojima fails to overcome the deficiencies of Uramichi discussed above. Specifically, Kojima fails to disclose or make obvious a reclining vehicle seat hinge assembly including a pair of primary pawls and a pair of secondary pawls, where the secondary pawls have a construction identical to that of the primary pawls, such that the primary and secondary pawls are interchangeable with one another, as required by independent claim 6, from which claim 31 depends.

Accordingly, the rejection is improper and should be withdrawn.

### **IV. Allowable Claims**

Claims 23-26, 29 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Since claim 6, from which claims 23-26, 29 and 30 depend, is believed to be allowable, as discussed above, claims 23-26, 29 and 30 are believed to be allowable in their

present form. Accordingly, the objection should be withdrawn.

V. **Conclusion**

Pending claims 1-33 are believed to be in form for allowance, and an indication to that effect is respectfully requested at this time. Please apply any charges or credits to Deposit Account No. 19-0733.

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Respectfully submitted,

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